information can be stored in <sub>the</sub> database 12d of the computer ~~manage 2~~ manager 12 for subsequent use in generating reports.

Referring to Figs. 1a, 2a and 5, at step 220 of Fig. 2a and from the Device List Web-page 500 (Fig. 4a), the user can elect to update the database 12d by selecting the Update Now

5 tab from the System Menu 500i. Selecting the Update Now tab from the System Menu 500i opens an Update Now Web-page. Fig. 5 shows an Update Now Web-page 600 in accordance with an embodiment of the present invention. At step 230 of Fig. 2a, the user can update the inventory and/or status information contained in the database 12d by selecting an Update Now button 600a which is defined on the Update Now Web-page 600 as shown in Fig. 5.

10 After selecting the Update Now button 600a, the computer manager 12 will concomitantly communicate with one or more of the UPS systems 18, 20, 22 and/or 24, which are associated with IP addresses defined in the IP address inventory list 500h (Fig. 4a). In communicating with the UPS systems 18, 20, 22 and/or 24, the manager computer 12 can receive and update the database 12d with updated inventory and/or status information related to each UPS

15 system 18, 20, 22 and/or 24, at step 240 of Fig. 2a.

Alternatively and referring further to Fig. 6, the user can elect at step 250 of Fig. 2a, to schedule a database 12d update at a later time by selecting, at step 260 of Fig. 2a, the Schedule Updates tab from the Configuration Menu 500j. Selecting the Schedule Updates tab from the Configuration Menu 500j from the Device List Web-page 500 opens a Schedule

20 Updates Web-page. Fig. 6 shows an embodiment of a Schedule Updates Web-page 700 in accordance with an embodiment of the present invention. In the Schedule Updates Web-page 700 and at step 270 of Fig. 2a, the user can enter a database 12d update cycle or number of database 12d updates that occur in a given period of time. Moreover, the user can select the day and time that the database 12d updates can occur. In maximizing the number of database

25 12d updates that occur in a given period of time and generating reports from the updated database 12d information, the user can minimize the time interval for which the UPS systems 18, 20, 22 and/or 24 are left unattended. Further, minimizing the time interval for which the UPS systems 18, 20, 22 and/or 24 are left unattended also minimizes failures thereof.

The user can elect to generate a number of reports at step 280 of Fig. 2a, by selecting

30 the Reports tab, at step 290 of Fig. 2b, from any one of the following: Status Web-page 400, Device List Web-page 500, Update Now Web-page 600, or Schedule Updates Web-page 700 (Figs. 3 through 6 respectively). In electing the Reports tab, the user is provided with a Reports menu 700a. At step 300 of Fig. 2b, the user can elect the Inventory tab from the Reports menu 700a. At step 310 of Fig. 2b, the user can select from and generate any one of

a number of predetermined ~~inventory reports~~. Alternatively and at ~~step 20~~ of Fig. 2b, the

*[handwritten annotations: "inventory", "step . 320", "CAS 4/16/06"]*

user can elect the Battery Status tab from the Reports menu 700a. At step 330 of Fig. 2b, the

user can select from and generate any one of a number of predetermined battery status

reports. The inventory reports can include UPS model, UPS location, UPS internet protocol

5      ("IP") address, UPS age, UPS battery age and/or UPS availability. The battery status reports

can include: Battery Self-test Results, Replace Battery Status, Battery Status by Load and/or

Battery Status by Runtime Remaining.

Fig. 7 is an exemplary Inventory Report 800 including UPS model information which

is generated in accordance with step 310 of Fig. 2b. The Inventory Report 800 further

10     includes a number of UPS model families and associated quantities of UPS systems defined

in each model family. Any one of the model families can be selected which generates another

report containing detailed information associated with the selected model family as shown in

Fig. 8.

Fig. 8 is another exemplary Inventory Report 900 including detailed information for

15     one of the UPS model families shown in Fig. 7. The detailed information can include,

Domain Name Service (DNS) name, Serial No., UPS Model, Contact and Location of the

UPS.

Fig. 9 is another exemplary Inventory Report 1000 including location information

which is generated in accordance with step 310 of Fig. 2b. The Inventory Report 1000

20     further includes a number of bar graphs that describe the quantity of UPS systems residing at

a predetermined location. Any one of the bar graphs can be selected which generates another

report containing detailed UPS location information as shown in Fig. 10.

Fig. 10 is another exemplary Inventory Report 1100 including UPS location details for

one of the UPS locations described in Fig. 9. The location details can include, DNS name,

25     Serial No., UPS Model, Contact, IP Address, UPS Name and Firmware Revision.

Fig. 11 is another exemplary Inventory Report 1200 including IP Address information,

which is generated in accordance with step 310 of Fig. 2b. The Inventory Report 1200 can

further include, DNS Name, UPS Model, UPS Name, UPS Serial No. and UPS Firmware

Revision.

30     Fig. 12 is another exemplary Inventory Report 1300 including UPS Age information

which is generated in accordance with step 310 of Fig. 2b. The Inventory Report 1300

groups a number of UPS systems in a predetermined UPS age range. For example, age

ranges can include: UPS systems between 0 and 1 year old; UPS systems between 1 and 2

years old; UPS systems between 2 and 3 years old; UPS systems between 3 and 4 years old;

UPS systems between 4 and ·5·years old and UPS systems of unknown age. UPS systems defined in any one of the number of predetermined age ranges can be selected which generates another report containing detailed information associated with UPS systems defined in the selected age range as shown in Fig. 13.

5      Fig. 13 is another exemplary Inventory Report 1400 including detailed information for UPS systems defined in one of the predetermined age ranges shown in Fig. 12. The detailed information can include, UPS Model, Serial No., Firmware Revision, DNS name, Contact, Location, IP Address, Battery Last Replacement Date and UPS Manufacture Date.

Fig. 14 is another exemplary Inventory Report 1500 including device unavailability

10     information which is generated in accordance with step 310 of Fig. 2b. The unavailability information identifies UPS systems that failed to respond to the most recent data update executed by the UPS manager computer. As a result of the failure to respond to the aforementioned data update operation, information included in the UPS unavailability report is only valid as of the most recent successful data update executed by the UPS manager

15     computer.

Fig. 15 is an exemplary Battery Status Report 1600 including self-test results which are generated in accordance with step 330 of Fig. 2b. The Fig. 15 report groups UPS systems by the self-tests results communicated to the UPS manager computer during the most recent data update. The self-test result groups can include: Failed, Passed and Unknown. Any one

20     of the self-test groups can be selected to generate another report containing detailed information related to UPS systems defined in the selected self-test group as shown in Fig. 16.

Fig. 16 is another exemplary Battery Status Report 1700 including detailed information of one of the self-test groups shown in Fig. 15. The detailed information defined in the self test group can include: Self-test Date, UPS Model, Serial No., Battery Status, DNS

25     name, Contact, Location, IP Address, Battery Last Replacement Date, UPS Manufacture Date and Firmware Revision.

Fig. 17 is another exemplary Battery Status Report 1800 including bad battery indicator information which is generated in accordance with step 330 of Fig. 2b. The Battery Status Report 1800 identifies and describes one or more UPS systems, which communicated

30     to the UPS manager computer during the most recent update, that its battery needs to be replaced. The Battery Status report can further include other UPS system related information similar to that described above and as shown in Fig. 17.

Fig. 18 is another exemplary Battery Status Report 1900 including load information which is generated in accordance with step 330 of Fig. 2b. The Battery Status Report 1900

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groups UPS systems according to a percentage of full load operation. This percentage of full load operation is communicated by each UPS system to the UPS manager computer during each update. Each UPS system can be assigned to a group in accordance with this percentage of full load operation, which is communicated to the UPS manager computer. The groups can

5 include percentage of full operation ranges from approximately: 0% to 10%; 10% to 20%; 20% to 30%; 30% to 40%; 40% to 50%; 50% to 60%; 60% to 70%; 70% to 80; 80% to 90%; 90% to 100% and Overload as shown in Fig. 18. Any one of the percentages of full operation ranges or groups can be selected to provide another report including UPS load details as shown in Fig. 19.

10      Fig. 19 is an exemplary Battery Status Report 2000 including UPS load details for one of the groups shown in Fig. 18. In the Battery Status Report 2000, the load details can include: Percentage-Load, Serial No., UPS Model, Firmware Revision, DNS name, Contact, Location, Runtime, IP Address and UPS Name.

      Fig. 20 is another exemplary Battery Status Report 2100 including runtime remaining

15 which is generated in accordance with step 330 of Fig. 2b. The Battery Status Report 2100 indicates the amount of runtime remaining for each UPS system at the time of the most recent update by the UPS manager computer. If a UPS system has not been operating on battery recently, then the remaining runtime should be a value equivalent to the maximum available runtime of the UPS system under the load associated with the UPS.

20      There are many advantages to the present invention including a method and system that enables a user to manage a number of UPS systems from a central location. Further, the user can dispatch technicians to maintain and inspect a number of UPS systems based on inventory and/or status information received from each UPS system. The time interval between UPS system status updates can be minimized by adjusting the inventory and/or status

25 information update cycle. Thus the time interval that the UPS system is left unattended can be minimized, which can also minimize system failures due to insufficient preventative maintenance or inspections.

      Having thus described at least one illustrative embodiment of the invention, various alterations, modifications and improvements will readily occur to those skilled in the art.

30 Such alterations, modifications and improvements are intended to be within the scope and spirit of the invention. Accordingly, the foregoing description is by way of example only and is not intended as limiting. The invention's limit is defined only in the following claims and the equivalents thereto.